

Project Number:	628
Category:	<i>Marine Hydrokinetic</i>
Date:	March 2009
Subject:	<i>Assess the Design/Inspection Criteria/Standards for Wave and/or Current Energy Generating Devices</i>
Performing Activity:	Free Flow Energy, Inc.
Principal Investigator:	A. Alawa
Contracting Agency:	Bureau of Safety and Environmental Enforcement
Summary:	Free Flow Energy performed a gap analysis to determine if modifications should be made to engineering specifications and regulatory standards to enable the placement of wave and current energy devices on the OCS without compromising safety and performance guidelines.
Key Findings:	<ul style="list-style-type: none"> Although standards organizations are developing engineering standards for marine hydrokinetic energy conversion, only a few engineering standards have been specifically written for wave and current facilities, equipment, and operations. Additionally, because of the dramatic variety of technologies being considered for marine energy conversion, some standards lack necessary specificity, thus weakening their effectiveness. Most device and site developers are not targeting the OCS; they are targeting the state waters closer to shores. The OCS wave and current energy conversion industry most likely will develop narrowly, especially regarding current energy conversion. An impartial assessment of ocean energy resources on the OCS would benefit the advancement of offshore wave and current energy conversion development.
Recommendations:	<ul style="list-style-type: none"> BOEM should take the lead in developing a memorandum of understanding with FERC that promotes a collaborative relationship to: <ol style="list-style-type: none"> 1. Maximize the efficiency and effectiveness of agency processes with regard to wave and current energy conversion facility inspection and monitoring; 2. Minimize overlap; 3. Ensure consistent policy; 4. Help advance the emerging marine energy industry; and 5. Support and strengthen federal renewable energy initiatives. BOEM should develop and/or join scientific and technical committees that develop engineering standards for the ocean energy industry so that bureau representatives directly engage in interagency and international efforts.

Subsequent Studies/Activities:	<ul style="list-style-type: none"> • TAP 629: <i>Assess the Design and Inspection Criteria and Standards for Wave and Current Energy Generating Devices</i>
Report Link:	AA : Assess the Design/Inspection Criteria/Standards for Wave and/or Current Energy Generating Devices, March 31, 2009 by Free Flow Energy, Lee NH